

LISTING OF CLAIMS

The listing of claims provided below replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) A circuit for performing device communication,
5 comprising:

a first state machine defined by circuitry configured to perform device communication, wherein the device communication is a transfer of data in accordance with a standard protocol from one device to another device, the first state machine circuitry being further configured to deviate ~~enable deviation~~ from the device
10 communication, the first state machine circuitry being further configured to obtain a status of the device communication and continue ~~to enable a continuation of~~ the device communication based on the obtained status of the device communication; and

a second state machine defined by circuitry configured to perform ~~monitor~~ the same device communication to be performed by the first state machine simultaneously
15 with performance of the device communication by the first state machine whereby a condition of the device communication performed by the second state machine represents a condition of the device communication performed by the first state machine, the second state machine circuitry being further configured to provide the status of the device communication to the first state machine ~~to enable the continuation of the device~~
20 ~~communication~~.

2. (Currently Amended) The ~~[[A]]~~ circuit for performing device communication as recited in claim 1, wherein the first state machine includes circuitry configured to receive a request to perform a task other than the device communication.

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3. (Currently Amended) The ~~[[A]]~~ circuit for performing device communication as recited in claim 2, wherein the first state machine includes circuitry configured to recognize the task other than the device communication as having a higher priority than the device communication and activate the first state machine circuitry
5 configured to deviate ~~enable deviation~~ from the device communication.

4. (Currently Amended) The ~~[[A]]~~ circuit for performing device communication as recited in claim 1, wherein the first state machine circuitry is configured to, upon activation of the first state machine to deviate from the device
10 communication, continue the device communication up to a state in the device communication at which the first state machine is required to provide a response to continue the device communication ~~an extent possible when deviation from the device communication is enabled.~~

15 5-6. (Cancelled)

7. (Currently Amended) The ~~[[A]]~~ circuit for performing device communication as recited in claim 1, wherein the device communication follows a Serial
20 Advanced Technology ~~[[AT]]~~ Attachment (SATA) protocol.

8. (Currently Amended) A method for performing device communication, comprising:
operating a first state machine to perform a frame transfer operation;
operating a second state machine to perform ~~monitor a status of the a~~ frame
25 transfer operation identical to the frame transfer operation being performed by the first

state machine simultaneously with performance of the frame transfer operation by the first state machine, whereby a condition of the frame transfer operation performed by the second state machine represents a condition of the frame transfer operation performed by the first state machine;

5 operating the first state machine to perform a task other than ~~[[that]]~~ the frame transfer operation, the first state machine interrupting its ~~deviating from the~~ frame transfer operation to perform the other task; and

 referring to the second state machine to determine a current state of the frame transfer operation interrupted by the first state machine, wherein the current state is
10 indicated by the condition of the frame transfer operation performed by the second state machine.

9. (Currently Amended) The ~~[[A]]~~ method for performing device communication as recited in claim 8, further comprising:

15 operating the first state machine to continue the frame transfer operation from the current state as determined by referring to the second state machine.

10. (Currently Amended) The ~~[[A]]~~ method for performing device communication as recited in claim 8, wherein the frame transfer operation is performed in
20 accordance with a Serial Advanced Technology ~~[[AT]]~~ Attachment (SATA) protocol.

11. (Currently Amended) The ~~[[A]]~~ method for performing device communication as recited in claim 8, further comprising:

 receiving a request to operate the first state machine to perform the ~~[[a]]~~ task other
25 than the frame transfer operation.

12. (Currently Amended) The ~~[[A]]~~ method for performing device communication as recited in claim 11, further comprising:

identifying the task other than the frame transfer operation as having a higher
5 priority than the frame transfer operation, the identifying causing the first state machine to be operated to perform the task other than the frame transfer operation.

13. (Currently Amended) The ~~[[A]]~~ method for performing device communication as recited in claim 8, further comprising:

10 prior to operating the first state machine to interrupt its frame transfer operation,
continuing to perform the frame transfer operation up to a state in the frame transfer
operation at which the first state machine is required to provide a response to continue its
frame transfer operation ~~an extent possible while the first state machine deviates from the~~
~~frame transfer operation to perform the other task.~~

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14. (Cancelled)

15. (Currently Amended) A computer readable storage medium ~~[[media]]~~ containing program instructions for performing device communication, comprising:

20 program instructions for operating a first state machine to perform a frame transfer operation;

program instructions for operating a second state machine to perform ~~monitor a~~
~~status of the~~ a frame transfer operation identical to the frame transfer operation being
performed by the first state machine simultaneously with performance of the frame
25 transfer operation performed by the first state machine, whereby a condition of the frame

transfer operation performed by the second state machine represents a condition of the frame transfer operation performed by the first state machine;

program instructions for operating the first state machine to perform a task other than ~~[[that]]~~ the frame transfer operation, the first state machine interrupting its deviating
5 ~~from the~~ frame transfer operation to perform the other task;

program instructions for referring to the second state machine to determine a current state of the frame transfer operation interrupted by the first state machine, wherein the current state is indicated by the condition of the frame transfer operation performed by the second state machine.

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16. (Currently Amended) The ~~[[A]]~~ computer readable storage medium ~~[[media]]~~ containing program instructions for performing device communication as recited in claim 15, further comprising:

program instructions for operating the first state machine to continue the frame
15 transfer operation from the current state as determined by referring to the second state machine.

17. (Currently Amended) The ~~[[A]]~~ computer readable storage medium ~~[[media]]~~ containing program instructions for performing device communication as
20 recited in claim 15, wherein the program instructions for operating the first state machine to perform frame transfer operation include program instruction for performing the frame transfer operation in accordance with a Serial Advanced Technology ~~[[AT]]~~ Attachment (SATA) protocol.

18. (Currently Amended) The ~~[[A]]~~ computer readable storage medium ~~[[media]]~~ containing program instructions for performing device communication as recited in claim 15, further comprising:

program instructions for receiving a request to operate the first state machine to
5 perform the ~~[[a]]~~ task other than the frame transfer operation.

19. (Currently Amended) The ~~[[A]]~~ computer readable storage medium ~~[[media]]~~ containing program instructions for performing device communication as recited in claim 18, further comprising:

10 program instructions for identifying the task other than the frame transfer operation as having a higher priority than the frame transfer operation, the identifying causing the first state machine to be operated to perform the task other than the frame transfer operation.

15 20. (Currently Amended) The ~~[[A]]~~ computer readable storage medium ~~[[media]]~~ containing program instructions for performing device communication as recited in claim 15, further comprising:

program instructions for prior to operating the first state machine to interrupt its frame transfer operation, continuing to perform the frame transfer operation up to a state
20 in the frame transfer operation at which the first state machine is required to provide a response to continue its frame transfer operation ~~an extent possible while the first state machine deviates from the frame transfer operation to perform the other task.~~

21. (Cancelled)

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